

AGNES

The weak circulation which was to become Agnes had been followed on synoptic charts for close to a week in the west central Philippine Sea. On September 14th, satellite data and aircraft reconnaissance indicated signs of development, and by the following afternoon, September's third tropical storm had formed.

Guided by an extension of the subtropical ridge to the Ryukyus, Agnes slowly edged northward (Figure 5-44) and then shifted to a westerly course while she intensified to a typhoon on the 17th. Possible recurvature existed with a trough in the westerlies approaching the northern Yellow Sea at this time; however, its influence was not felt and Agnes followed the weak ridge making landfall on Taiwan between Hualein and Ilan early on the evening of the 18th (Figure 5-45). After crossing the Taiwan straits, Agnes arrived on the China mainland near Nanchang and dissipated as she moved inland.

Winds of 58 kt gusting to 78 kt were felt on the islands offshore of northeastern Taiwan while heavy rainfall produced by typhoon Agnes amounted up to 17.4 inches in 48 hours at Anpu in the mountainous terrain of the island. Flooding in Taipei was reported extremely serious as much of the lower areas of the city were badly flooded. Over 100 dwellings were partially or totally destroyed by the flooding; one person was reported killed and five others missing due to the typhoon.

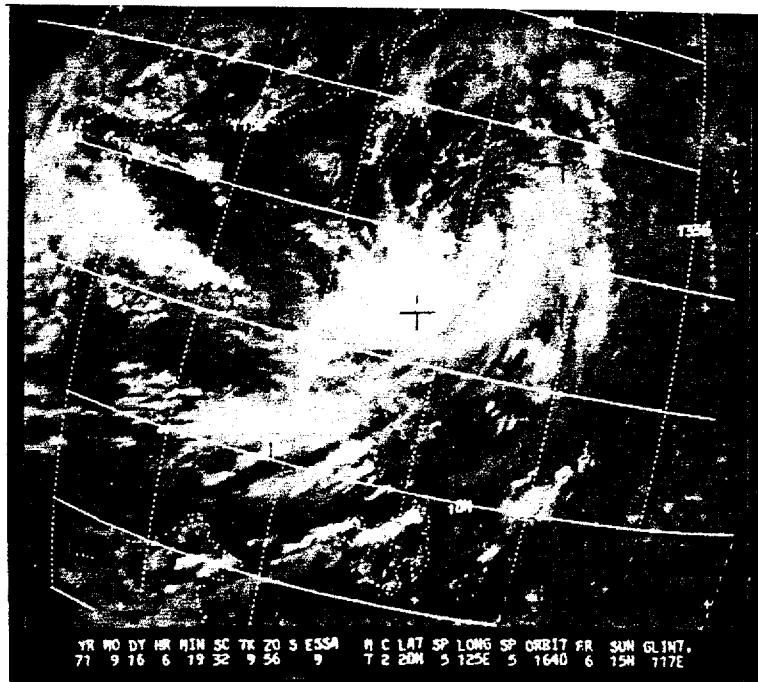


FIGURE 5-44. TROPICAL STORM AGNES NORTHEAST OF LUZON ON 16 SEPTEMBER.

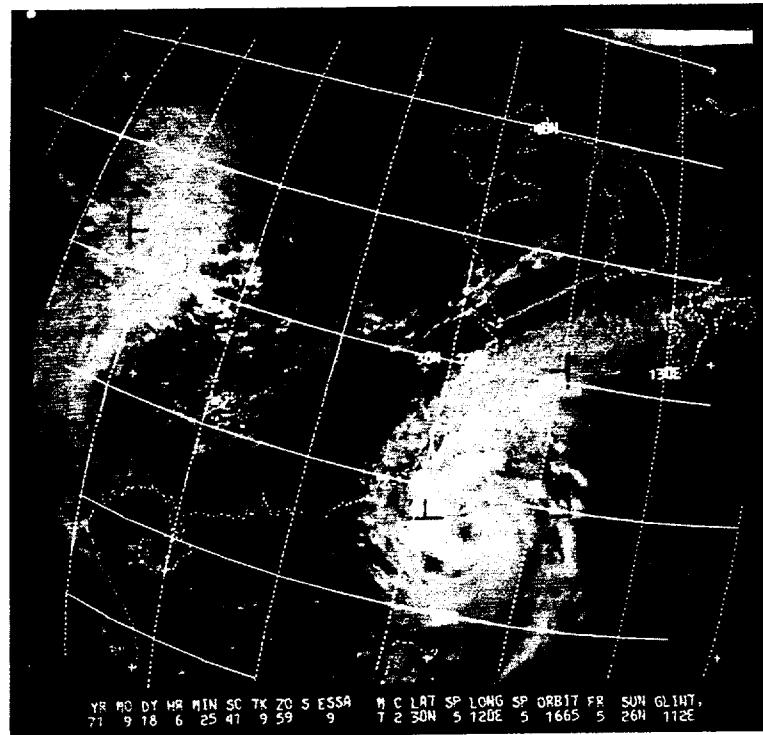


FIGURE 5-45. TYPHOON AGNES IS SIGHTED BY ESSA-9 ON 18 SEPTEMBER PRIOR TO LANDFALL ON TAIWAN.

TYPHOON AGNES
EYE FIXES FOR CYCLONE NO. 29
15 SEP - 19 SEP 71

FIX NO.	TIME	POSIT	METHOD	UNIT-		FLT	OBS	OBS	MIN	700MB	LVL	FLT	EYE	URFN-	EYE	THKN	WALL	CLD	REMARKS	POSIT OF RADAR	
				FLT	LVL																
1	130514Z	16.0N 127.5E	SATELLIT---	STA H																FIRST HLTN	
2	140014Z	16.0N 126.5E	SATELLIT---	STA R																LESS ORGANIZED	
3	140553Z	16.5N 126.1E	VQ-P- 5-20	---	---	25	1000	---	---	25/25	CIRC			35	--	--	--	--	NO ORGANIZ ON RDR		
4	150000Z	16.3N 127.0E	VQ-P- 5-20	700MB	35	---	---	---	---	---	---	---	---	---	---	---	---	---	700MB WIND CNTR		
5	150521Z	16.0N 126.5E	SATELLIT---	STA C																BETTER ORGANIZED	
6	151030Z	16.1N 126.0E	VQ-P- 5-15	700MB	40	---	94/	3027	08/08	---	---	---	---	---	---	---	---	---	700MB WIND CNTR		
7	152120Z	16.4N 125.0E	VQ-P- 5- 5	700MB	40	35	94C	3005	08/08	---	---	---	---	---	---	---	---	---	NO RDR PRES		
8	160020Z	21.5N 126.5E	SATELLIT---	STA C															LITTLE CHANGE		
9	161000Z	19.6N 126.5E	VQ-P- C-28	700MB	50	30	94C	2987	09/08	---	---	---	---	---	---	---	---	---	NO RDR PRES		
10	161002Z	20.3N 126.0E	VQ-P- 5- 5	---	---	55	94L	---	26/22	CIRC				30	--	--	--	--	PORR ORGANIZED		
11	162101Z	21.1N 125.0E	VQ-P- 5- 5	---	---	40	94/	---	26/25	CIRC				45	--	--	--	--	HCHG MURF ORGANIZ		
12	170415Z	21.3N 126.2E	VQ-P- 5-15	700MB	40	35	94C	2947	12/11	---	---	---	---	---	---	---	---	---	NO NC-700MB CNTR		
																			SNM W		
13	170527Z	21.5N 124.0E	SATELLIT---	STA C															STRONGER		
14	170700Z	21.7N 124.1E	VQ-P- 5- 5	700MB	45	40	98U	2917	11/11	---	---	---	---	---	---	---	---	---	SAME AS 04157 RMK		
15	171000Z	22.3N 124.5E	VQ-P- 5- 5	700MB	50	45	97D	2905	12/09	---	---	---	---	---	---	---	---	---	NO NC		
16	171045Z	22.5N 124.5E	LNU RDH---																TAIWAN RDR		
17	171555Z	22.0N 124.2E	LNU RDH---																STN 46699	24.0N 121.4E	
18	172100Z	23.2N 124.2E	LNU RDH---																STN 46699	24.0N 121.4E	
19	172215Z	23.0N 124.0E	LNU RDH---																STN 4727	24.0N 122.3E	
20	172120Z	23.3N 123.0E	LNU RDH---																TAIWAN RDR		
21	172200Z	23.3N 123.0E	LNU RDH---																TAIWAN RDR		
22	172325Z	23.0N 121.0E	LNU RDH---																GOOD FIX-47927	24.0N 122.3E	
23	180100Z	23.3N 121.0E	LNU RDH---																POOR FIX-47918	24.0N 122.2E	
24	180105Z	23.1N 121.0E	VQ-P- 5-10	---	---	70	961	---	27/23	CIRC		40	--	--	--	--	--	--	NO NC-SST 85 NEG		
25	180300Z	23.4N 122.0E	LNU RDH---																STN 47918	24.3N 122.2E	
26	180355Z	23.0N 121.1E	VQ-P- 5- 5	---	---	60	970	---	27/22	CIRC		40	--	--	--	--	--	--	NO NC		
27	180400Z	23.0N 122.0E	LNU RDH---																STN 47761	24.0N 121.4E	
28	180430Z	23.3N 122.0E	LNU RDH---																STN 47927	24.0N 122.3E	
29	180540Z	23.0N 122.0E	LNU RDH---																STN 47761	24.0N 121.4E	
30	180625Z	23.0N 122.0E	SATELLIT---	STA X	DIA	3	CAT 4.0												STRONGER		
31	180640Z	23.0N 122.0E	VQ-P- 5- 5	700MB	---	---	970	2800	16/13	CIRC		35	--	--	--	--	--	--	NO NC-SST 85 NEG		
32	180740Z	23.0N 122.0E	LNU RDH---																FIJCHI RDR		
33	180800Z	24.0N 122.0E	LNU RDH---																		
34	181030Z	23.0N 122.0E	VQ-P- 5-15	400MB	60	---	---	---	77-9	---	---	---	---	---	---	---	---	---	NO RDR PRES		
35	182200Z	24.0N 120.0E	LNU RDH---																TAIWAN RDR		

TYPHOON AGNES

0600Z 15 SEP TO 0600Z 19 SEP

	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST			ERRORS WIND DST WIND
	POSIT	WINU	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	
150600Z	18.8N	126.3E	35	18.2N	126.4E	30	36	-5	18.2N	124.2E	40	128	0	---	---	--
151200Z	19.0N	126.0E	35	18.2N	125.9E	30	48	-5	18.2N	123.4E	45	172	0	---	---	--
151800Z	19.2N	125.8E	40	18.8N	125.7E	30	25	-10	18.7N	123.3E	45	165	-5	---	---	--
160000Z	19.5N	125.7E	40	19.4N	125.6F	30	8	-10	20.3N	124.0E	45	86	-10	---	---	--
160600Z	19.8N	125.7E	40	19.8N	125.2E	30	28	-10	21.2N	123.3E	45	103	-15	---	---	--
161200Z	20.1N	125.7E	45	19.5N	125.3E	30	42	-15	20.2N	124.0E	50	124	-15	---	---	--
161800Z	20.4N	125.6E	50	20.4N	125.8E	45	11	-5	21.4N	125.1E	55	99	-10	22.8N	124.3E	60
170000Z	20.9N	125.4E	55	21.3N	124.7E	45	46	-10	23.9N	122.7E	55	58	-15	27.0N	122.5E	60
170600Z	21.6N	125.1E	60	21.4N	125.0F	45	13	-15	23.5N	123.4E	55	50	-20	25.9N	122.2E	60
171200Z	22.2N	124.6E	65	22.5N	124.5F	45	19	-20	24.9N	123.7E	60	124	5	---	---	--
171800Z	22.7N	124.0E	65	23.2N	124.3F	50	34	-15	25.9N	123.8E	60	193	15	---	---	--
180000Z	23.1N	123.3E	70	23.2N	123.4E	65	8	-5	25.6N	122.0E	75	131	35	---	---	--
180600Z	23.6N	122.5E	75	23.7N	122.7E	70	12	-5	26.8N	122.4E	65	216	30	---	---	--
181200Z	24.1N	121.6E	55	24.3N	121.9E	70	20	15	---	---	22	---	---	---	---	--
181800Z	24.3N	120.7E	45	24.3N	121.3F	65	33	20	---	---	22	---	---	---	---	--
190000Z	24.7N	119.8E	40	24.3N	119.9E	50	25	10	---	---	22	---	---	---	---	--
190600Z	25.2N	118.8E	35	25.1N	118.8F	40	6	5	---	---	22	---	---	---	---	--

TYPHOONS WHILE WIND OVER 35KTS

	WARNING				ALL FORECASTS			
	24-HR	48-HR	72-HR		24-HR	48-HR	72-HR	
AVERAGE FORECAST ERROR	24NM	127NM	201NM	0NM	24NM	127NM	201NM	0NM
AVERAGE RIGHT ANGLE ERROR	19NM	94NM	102NM	0NM	19NM	94NM	102NM	0NM
AVERAGE MAGNITUDE OF WIND ERROR	11KTS	13KTS	20KTS	0KTS	11KTS	13KTS	20KTS	0KTS
AVERAGE BIAS OF WIND ERROR	-5KTS	-0KTS	20KTS	0KTS	-5KTS	-0KTS	20KTS	0KTS
NUMBER OF FORECASTS	17	13	3	0	17	13	3	0

